

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO.: L6780/251099	SERIAL NO.:
MATERIAL INFORMATION STATEMENT (Use several sheets if necessary)		APPLICANT: Steve W. Braun	
		FILING DATE: 03/28/01	GROUP:

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
EW	3,883,217	05/13/75	Love et al.			
EW	3,936,141	02/03/76	Milton			
EW	4,054,366	10/18/77	Barnoski et al.			
EW	4,166,946	09/04/79	Chown et al.			
EW	4,234,969	11/18/80	Singh			
EW	4,249,266	02/03/81	Nakamori			
EW	4,301,543	11/17/81	Palmer			
EW	4,307,933	12/29/81	Palmer et al.			
EW	4,317,614	03/02/82	Palmer			
EW	4,366,565	12/28/82	Herskowitz			
EW	4,367,460	01/04/83	Hodara			
EW	4,423,922	01/03/84	Porter			
EW	4,446,515	05/01/84	Sauer et al.			
EW	4,457,581	07/03/84	Johnson et al.			
EW	4,482,980	11/13/84	Korowitz et al.			
EW	4,506,153	03/19/85	Ohno			
EW	4,543,574	09/24/85	Takagi et al.			
EW	4,554,511	11/19/85	Braun			
EW	4,577,184	03/18/86	Hodara et al.			
EW	4,595,839	06/17/86	Braun et al.			
EW	4,630,256	12/16/86	Albanese			
EW	4,671,608	06/19/87	Konish			
EW	4,674,830	06/23/87	Shaw et al.			
EW	4,717,229	01/05/88	Cutler			
EW	4,759,011	07/19/88	Hicks Jr.			
EW	4,756,595	07/12/88	Braun et al.			
EW	4,761,833	08/02/88	Epworth			
EW	4,786,130	11/22/88	Georgiou et al.			
EW	4,810,052	03/07/89	Fling			
EW	4,850,047	07/18/89	Iguchi et al.			
EW	4,883,335	11/28/89	Alferness et al.			
EW	4,898,565	02/06/90	Braun			
EW	4,932,004	06/05/90	Hodara et al.			
EW	4,946,244	08/07/90	Schembri			
EW	5,046,137	09/03/91	Kurobe et al.			

JC986 U.S. PTO

09/820973



03/29/01

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY DOCKET NO.: L6780/251099		SERIAL NO.:	
MATERIAL INFORMATION STATEMENT (Use several sheets if necessary)				APPLICANT: Steve W. Braun			
				FILING DATE: 03/28/01		GROUP:	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
EW	5,058,974	10/22/91	Mollenauer				
EW	5,083,874	01/28/92	Aida et al.				
EW	5,117,303	05/26/92	Desurvire et al.				
EW	5,129,019	07/07/92	Robberg et al.				
EW	5,133,031	07/21/92	Tanaka et al.				
EW	5,179,603	01/12/93	Hall et al.				
EW	5,181,134	01/19/93	Fatehi et al.				
EW	5,187,605	02/16/93	Shikata et al.				
EW	5,212,577	05/18/93	Nakamura et al.				
EW	5,222,166	06/22/93	Weltha				
EW	5,307,197	04/26/94	Tanabe et al.				
EW	5,309,564	05/03/94	Bradley et al.				
EW	5,315,424	05/24/94	Boden et al.				
EW	5,317,580	05/31/94	Auffret et al.				
EW	5,347,384	09/13/94	McReynolds et al.				
EW	5,369,516	11/29/94	Uchida				
EW	5,412,746	05/02/95	Rossberg et al.				
EW	5,432,874	07/11/95	Muraguchi				
EW	5,479,082	12/26/95	Calvani et al.				
EW	5,533,153	07/02/96	Ota				
EW	5,539,558	07/23/96	Yonemura et al.				
EW	5,548,431	08/20/96	Shin et al.				
EW	5,572,612	11/05/96	Delavaux et al.				
EW	5,615,290	03/25/97	Harasawa et al.				
EW	5,664,035	09/02/97	Tsuji et al.				
EW	5,684,899	11/04/97	Ota				
EW	5,712,932	01/27/98	Alexander et al.				
EW	5,717,795	02/10/98	Sharma et al.				
EW	5,764,821	06/09/98	Glance				
EW	5,778,118	07/07/98	Sridhar				
EW	5,793,908	08/11/98	Mizuochi et al.				
EW	5,796,890	08/18/98	Tsuji et al.				
EW	5,809,187	09/15/98	Peck, Jr. et al.				
EW	5,825,949	10/20/98	Choy et al.				
EW	5,838,989	11/17/98	Hutchison et al.				

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY DOCKET NO.: L6780/251099		SERIAL NO.:	
MATERIAL INFORMATION STATEMENT (Use several sheets if necessary)				APPLICANT: Steve W. Braun			
				FILING DATE: 03/28/01		GROUP:	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<i>EW</i>	5,943,148	08/24/99	Hamel et al.				
<i>EW</i>	6,014,481	01/11/00	Kremers				
<i>EW</i>	6,122,095	09/19/00	Fatchi			8/29/97	
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
<i>EW</i>	Appln. 0 069 356 A2	01/12/83	EPO				✓
<i>EW</i>	Appln 0 105 753 A2	04/18/84	EPO			✓	
<i>EW</i>	Appln 0 164 652 A2	12/18/85	EPO				✓
<i>EW</i>	Appln 0 231 635 A2	08/12/87	EPO			✓	
<i>EW</i>	Appln 0 356 090 A2	02/28/90	EPO			✓	
<i>EW</i>	Appln 0 739 103 A2	10/23/96	EPO			✓	
<i>EW</i>	Appln 0 744 797 A1	11/27/96	EPO				✓
<i>EW</i>	Appln 0 905 936 A2	03/31/91	EPO			✓	
<i>EW</i>	PUB EP000103873A2	03/28/94	EPO			✓	
<i>EW</i>	86-191340/30	06/13/86	France				✓
<i>EW</i>	DE 3807072 A1	08/04/88	Germany				✓
<i>EW</i>	DE 3938856 A1	11/23/89	Germany				✓
<i>EW</i>	DE 4331330 A1	09/15/93	Germany				✓
<i>EW</i>	DE 4427187 A1	02/08/96	Germany				✓
<i>EW</i>	7-202921	08/04/94	Japan				✓
<i>EW</i>	11-331224	03/31/99	Japan				✓
<i>EW</i>	2,087,679	05/26/82	U.K.			✓	
<i>EW</i>	2,102,232	01/26/83	U.K.			✓	
<i>EW</i>	2,189,961	11/04/87	U.K.			✓	
<i>EW</i>	WO 93/03406	02/18/93	WIPO			✓	
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>EW</i>	Stewart D. Personick, <i>Optical Fiber Transmission Systems</i> 1 - 3 (1981)						
<i>EW</i>	H. Hodara and E. Miles, <i>High-Speed Local Area Networks, Fiber and Integrated Optics</i> 253 - 277 (1992)						

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO.: L6780/251099	SERIAL NO.:
MATERIAL INFORMATION STATEMENT (Use several sheets if necessary)		APPLICANT: Steve W. Braun	
		FILING DATE: 03/28/01	GROUP:
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)			
<i>EW</i>	N.A. Olsson, <i>Lightwave Systems With Optical Amplifiers</i> , Journal of Lightwave Technology 1071-1082 (July, 1989)		
<i>EW</i>	ITU-T Recommendation G.681, Series G: Transmission Systems and Media, Digital Systems and Networks; Functional characteristics of interoffice and long-haul systems using optical amplifiers, including optical multiplexing (10/96)		
<i>EW</i>	ITU-T Recommendation G.692, Series G: Transmission Systems and Media, Digital Systems and Networks; Optical interfaces for multichannel systems with optical amplifiers (10/98)		
<i>EW</i>	Gordon Thomas, David A. Ackerman, Paul R. Prucnal, and S. Lance Cooper, <i>Physics In The Whirlwind of Optical Communications</i> , Physics Today 30-36 (Sept. 2000)		
<i>EW</i>	Chart and figures for optical fiber cable and baseband transmission, available at http://www.microsoft.com/technet/WFW/wfw31/1_ch1.asp		
<i>EW</i>	HDR 7.0 2 73; 7.0 Fiber Optic Ethernet -- Types FOIRL and 10 BASE-F available at http://www.uni-trier.de/infos/ether/ethernet-guide/ethernet-guide.html		
<i>EW</i>	3.0 IEEE Acronyms available at http://spacey.net/davis/Design_Ethernet_Note.html		
<i>EW</i>	Fibre Channel -- Overview of the Technology, 09/09/2000, pp 1 -- 9 available at http://fibrechannell.org/technology		
<i>EW</i>	Bi-Directional Optical Backplane Bus for Board to Board Optoelectronic Interconnects, Gicheri Kim, Jinghui Fa and Ray T. Chen, 1-4 (09/09/2000) available at http://ece.utexas.edu/projects/ece/mrc/profs/chen_projects/optbus/optbus.html		
<i>EW</i>	SOME Bus (Simultaneous Optical Multiprocessor Exchange Bus)(09/09/2000) available at http://eb.uah.edu/~cohen/some_bus/some_bus.html		
<i>EW</i>	Integrated Explorations of the Spectral, Temporal and Spatial Degrees of Freedom 1 (09/09/2000) available at http://thebusinessedge.com/reruns/cito/sargent/sld001.htm		
<i>EW</i>	Challenges in IP LANs on Higher-Dimensional Encoding (slide 4) (09/09/2000) available at http://thebusinessedge.com/reruns/cito/sargent/sld004.htm		
<i>EW</i>	0034-P PCI Fibre Channel Optical Host BUS Adapter 1- 4 available at http://solutions.sun.com/dbsearch/index.cgi?STATE=product&CMD=show&p_id=58181 (09/09/2000)		
<i>EW</i>	Architectural and Engineering Issues for Building an Optical Internet 1 -- 55 (09/09/00) available at http://www.canet3.net/papers/ArchandEngIssues.html		
<i>EW</i>	Baker, <i>Monomode Fiber-Optic Design with Local- Area and Long-Haul Network Applications</i> 370-371		
<i>EW</i>	Karim, <i>Chaper 9: Electro-Optical Devices and Systems</i> , Fiber-Optics-Based Devices and Systems 434-435		
<i>EW</i>	Chinlon Lin, <i>Systems Applications of WDM Technologies in Optical Communications</i> , SPIE-International Society for Optical Engineering (Aug. 15-18, 1994)		
<i>EW</i>	Manuel Lopez-Amo, Loudon T Blair & Paul Urquhart, <i>Wavelength-Division-Multiplexed distributed optical fiber amplifier bus network for data and sensors</i> , Optics Letter 1159-61(July 15, 1993)		
<i>EW</i>	Francesco Matera & Marina Settembre, <i>Performance Evaluation of Optically Amplified Systems Operating in Optical Networks</i> , Microwave & Optical Technology Letters (Nov. 1996)		
<i>EW</i>	Spirit et al., <i>140-km 20-Gbit/s repeaterless transmission employing distributed erbium amplification</i> , Optical Fiber Communication Conference (1992)		
EXAMINER: <i>[Signature]</i>		DATE CONSIDERED: <i>7/2005</i>	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			



Sheet 1 of 1

Form PTO-1449

Docket No.:
50777-251099

Application No. 09/820,973

**INFORMATION DISCLOSURE
CITATION
IN AN APPLICATION**
(Use several sheets if necessary)

Applicant: **Steve W. Braun**

Filing Date: March 29, 2001

Group Art Unit
2874

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Translation
<i>AE</i>	5,361,262	11/01/94	Cheung			
<i>AE</i>	6,111,888	08/29/00	Green, et al.			
			/			

NON-U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation
<i>A</i>	EP0393293	10/24/90	Europe (EPO)			
<i>D</i>	EP0451426	10/16/91	Europe (EPO)			
<i>S</i>	EP0503212	09/16/92	Europe (EPO)			
			/			

OTHER MATERIAL

[illegible]

Examiner:

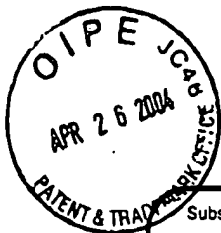
-Date Considered:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY DOCKET NO. 50777/251099		SERIAL NO.: 09/820,973	
MATERIAL INFORMATION STATEMENT (Use several sheets if necessary)				APPLICANT. Steve W. Braun			
				FILING DATE. March 29, 2001		GROUP. 26287433	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
EW	3,887,876	06/03/75	Zeidler				
EW	3,943,358	03/09/76	Reymond et al.				
EW	4,435,849	03/06/84	Ilgnier et al.				
EW	4,731,784	03/15/88	Keller et al				
EW	4,829,593	05/09/89	Hara				
EW	4,947,134	08/07/90	Olsson				
EW	4,958,354	09/18/90	Urakami et al.				
EW	5,080,505	01/14/92	Epworth				
EW	5,117,196	05/26/92	Epworth et al.				
EW	5,296,957	03/22/94	Takahashi et al.				
EW	5,502,589	03/26/96	Yamamoto et al.				
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
EW	GB 2 255 683 A	11/11/92	Great Britain				
EW	DE 30 07 958	09/17/81	German*			X	
EW	GB 2 073 877 A	10/21/81	Great Britain				
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER:				DATE CONSIDERED: 1/2005			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

*For English version see related Great Britain Application No. 2 073 877 A



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	09/820,973
Date Filed:	March 29, 2001
First Named Inventor	Braun
Group Art Unit	2874
Examiner Name	
Attorney Docket Number	50777/251099

U. S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
EW		4,545,074	10/01/1985	Balliet, et al.	
EW		2002/0018260 A1	02/14/2002	Kisovec, et al.	Date No Good
EW		6,449,072 B1	09/10/2002	Sian, et al.	

FOREIGN PATENT DOCUMENTS

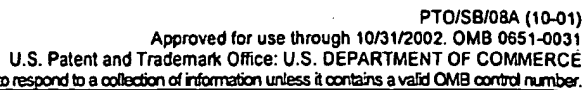
Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
EW		0 380 341 A2	08/01/1990	Europe		
EW		1 246 378 A2	10/02/2002	Europe		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
EW		International Search Report in related Application No. PCT/US03/30326	
EW		International Search Report in related Application No. PCT/US03/29970	

Examiner Signature		Date Considered	1/2005
-----------------------	--	--------------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Complete if Known

Application Number	09/820,973
Filing Date	March 29, 2001
First Named Inventor	Steve W. Braun
Group Art Unit	2874
Examiner Name	Sanghavi, HEMANG
Attorney Docket Number	50777/251099

U.S. PATENT DOCUMENTS

[illegible]

Examiner Signature

Date Considered

1/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1801592



Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number	09/820,973
Filing Date	March 29, 2001
First Named Inventor	Steve W. Braun
Group Art Unit	2874
Examiner Name	Sanghavi, HEMANG
Attorney Docket Number	50777/251099

Sheet	1	of	1
-------	---	----	---

[illegible]

1/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1826405

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/820,973
Filing Date	March 29, 2001
First Named Inventor	Steve W. Braun
Group Art Unit	2874
Examiner Name	
Attorney Docket Number	50777/251099

Sheet	1	of	2
-------	---	----	---

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
fr		0 899 161 A1	03/03/1999	Europe		Abstract
2		0 350 720 A2 and A3	01/17/2001	Europe		Abstract
2		0 414 333 A2 and A3	02/27/1991	Europe		

Examiner Signature

Date Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1558658

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number	09/820,973
Filing Date	March 29, 2001
First Named Inventor	Steve W. Braun
Group Art Unit	2874
Examiner Name	
Attorney Docket Number	5077/251099

Sheet	2		2
-------	---	--	---

[illegible]

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

